

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of obtaining secure registration by a memory module (UICC) in a multicast-broadcast-multimedia system (MBMS), the method comprising:
 - receiving a random number;
 - generating a radio access network key (RAK) as a function of the random number and a key selected from the group consisting of a public land mobile network key (PK) and a broadcast access key (BAK);
 - generating temporary registration key (RGK) as a function of the RAK and a user identification number; and
 - authenticating at least one registration message in the MBMS based on the RGK, wherein the RGK is a function of of the RAK, a service identification number and a user identification number.
2. (Original) The method of claim 1, further comprising transmitting the RGK to a mobile telephone.
3. (Original) The method of claim 1, further comprising receiving a provisioning message from a broadcast-multicast service center.
4. (Original) The method of claim 3, wherein the provisioning message is a function of the PK and a permanent registration key (RK).
5. (Original) The method of claim 3, further comprising extracting the PK from the provisioning message.
6. (Canceled) ~~The method of claim 1, wherein the RGK is a function of the RAK, a service identification number and a user identification number.~~

7. (Currently Amended) The method of claim [[6]] 1, wherein the RGK is a function of the RAK and a cyclic redundancy code (CRC) computed from the service identification number and the user identification number.

8. (Original) The method of claim 1, wherein the UICC comprises a subscriber identity module (SIM) in a Global System for Mobile communication (GSM) system.

9. (Original) The method of claim 1, wherein the UICC comprises a removable user identity module (RUIM) in a code division multiple access (CDMA) system.

10. (Original) The method of claim 1, wherein the PK is provisioned by using a public key.

11. (Original) The method of claim 1, wherein the BAK is provisioned by using a public key.

12. (Currently Amended) A method of obtaining secure registration by a mobile station in a multicast-broadcast-multimedia system (MBMS), the method comprising:

receiving a random number from a radio access network;

transmitting the random number to a memory module (UICC);

receiving from the UICC a temporary registration key (RGK) based on the random number and a user identification number; and

authenticating at least one registration message in the MBMS based on the RGK, wherein the RGK is a function of a radio access network key (RAK), a service identification number and a user identification number, and wherein the RAK is a function of the random number and a key selected from the group consisting of a public land mobile network key (PK) and a broadcast access key (BAK).

13. (Canceled) ~~The method of claim 12, wherein the RGK is a function of a radio access network key (RAK) which is a function of the random number and a key selected from~~

~~the group consisting of a public land mobile network key (PK) and a broadcast access key (BAK).~~

14. (Currently Amended) The method of claim ~~[[13]]~~ 12, wherein the PK is extracted from a provisioning message received from a broadcast-multicast service center.

15. (Original) The method of claim 14, wherein the provisioning message is a function of the PK and a permanent registration key (RK).

16. (Canceled) ~~The method of claim 13, wherein the RGK is a function of the RAK, a service identification number and a user identification number.~~

17. (Currently Amended) The method of claim ~~[[16]]~~ 12, wherein the RGK is a function of the RAK and a cyclic redundancy code (CRC) computed from the service identification number and the user identification number.

18. (Original) The method of claim 12, wherein the UICC comprises a subscriber identity module (SIM) in a Global System for Mobile communication (GSM) system.

19. (Original.) The method of claim 12, wherein the UICC comprises a removable user identity module (RUTM) in a code division multiple access (CDMA) system.

20. (Original) The method of claim 12, wherein the PK is provisioned by using a public key.

21. (Original) The method of claim 12, wherein the BAK is provisioned by using a public key.

22. (Currently Amended) A memory module stored on a computer readable storage medium, comprising:

receiving logic configured for receiving a random number;

means for generating a radio access network key (RAK) as a function of the random number and a key selected from the group consisting of a public land mobile network key (PK) and a broadcast access key (BAK);

means for generating a temporary registration key (RGK) as a function of the RAK and a user identification number; and

means for authenticating at least one registration message in the MBMS based on the RGK, wherein the RGK is a function of the RAK, a service identification number and a user identification number.

23. (Original) The memory module of claim 22, further comprising means for transmitting the RGK to a mobile telephone.

24. (Original) The memory module of claim 22, further comprising means for receiving a provisioning message from a broadcast-multicast service center.

25. (Original) The memory module of claim 24, wherein the provisioning message is a function of the PK and a permanent registration key (RK).

26. (Original) The memory module of claim 24, further comprising means for extracting the PK from the provisioning message.

27. (Canceled) ~~The memory module of claim 22, wherein the RGK is a function of the RAK, a service identification number and a user identification number.~~

28. (Currently Amended) The memory module of claim [[27]] 22, wherein the RGK is a function of the RAK and a cyclic redundancy code (CRC) computed from the service identification number and the user identification number.

29. (Original) The memory module of claim 22, wherein the PK is provisioned by using a public key.

30. (Original) The memory module of claim 22, wherein the BAK is provisioned by using a public key.

31. (Currently Amended) A mobile station apparatus, comprising:
receiving logic configured for receiving a random number from a radio access network;
means for transmitting the random number to a memory module (UICC);
means for receiving from the UICC a temporary registration key (RGK) based on the random number and a user identification number; and
means for authenticating at least one registration message in the MBMS based on the RGK, wherein the RGK is a function of a radio access network key (RAK), a service identification number and a user identification number, and wherein the RAK is a function of the random number and a key selected from the group consisting of a public land mobile network key (PK) and a broadcast access key (BAK).

32. (Canceled) ~~The apparatus of claim 31, wherein the RGK is a function of a radio access network key (RAK) which is a function of the random number and a key selected from the group consisting of a public land mobile network key (PK) and a broadcast access key (BAK).~~

33. (Currently Amended) The apparatus of claim ~~[[32]]~~ 31, wherein the PK is extracted from a provisioning message received from a broadcast-multicast service center.

34. (Original) The apparatus of claim 33, wherein the provisioning message is a function of the PK and a permanent registration key (RK).

35. (Canceled) ~~The apparatus of claim 32, wherein the RGK is a function of the RAK, a service identification number and a user identification number.~~

36. (Currently Amended) The apparatus of claim ~~[[35]]~~ 31, wherein the RGK is a function of the RAK and a cyclic redundancy code (CRC) computed from the service identification number and the user identification number.

37. (Original) The apparatus of claim 31, wherein the UICC comprises a subscriber identity module (SIM) in a Global System for Mobile communication (GSM) system.

38. (Original) The apparatus of claim 31, wherein the UICC comprises a removable user identity module (RUIM) in a code division multiple access (CDMA) system.

39. (Original) The apparatus of claim 31, wherein the PK is provisioned by using a public key.

40. (Original) The apparatus of claim 31, wherein the BAK is provisioned by using a public key.

41. (Currently Amended) A computer readable medium embodying a method of obtaining secure registration by a memory module (UICC) in a multicast-broadcast-multimedia system (MBMS), the method comprising:

receiving a random number;

generating a radio access network key (RAK) as a function of the random number and a key selected from the group consisting of a public land mobile network key (PK) and a broadcast access key (BAK);

generating a temporary registration key (RGK) as a function of the RAK and a user identification number; and

authenticating at least one registration message in the MBMS based on the RGK, wherein the RGK is a function of the RAK, a service identification number and a user identification number.

42. (Original) The computer readable medium of claim 41, wherein the method further comprises transmitting the RGK to a mobile telephone.

43. (Original) The computer readable medium of claim 41, wherein the method further comprises receiving a provisioning message from a broadcast-multicast service center.

44. (Original) The computer readable medium of claim 43, wherein the provisioning message is a function of the PK and a permanent registration key (RK).

45. (Original) The computer readable medium of claim 43, wherein the method further comprises extracting the PK from the provisioning message.

46. (Currently Amended) ~~The computer readable medium of claim 41, wherein the RGK is a function of the RAK, a service identification number and a user identification number.~~

47. (Currently Amended) The computer readable medium of claim ~~[[46]]~~ 41, wherein the RGK is a function of the RAK and a cyclic redundancy code (CRC) computed from the service identification number and the user identification number.

48. (Original) The computer readable medium of claim 41, wherein the UICC comprises a subscriber identity module (SIM) in a Global System for Mobile communication (GSM) system.

49. (Original) The computer readable medium of claim 41, wherein the UICC comprises a removable user identity module (RUIM) in a code division multiple access (CDMA) system.

50. (Original) The computer readable medium of claim 41, wherein the PK is provisioned by using a public key.

51. (Original) The computer readable medium of claim 41, wherein the BAK is provisioned by using a public key.

52. (Currently Amended) A computer readable medium embodying a method obtaining secure registration by a mobile station in a multicast-broadcast-multimedia system (MBMS), the method comprising:

receiving a random number from a radio access network;
transmitting the random number to a memory module (UICC);
receiving from the UICC a temporary registration key (RGK) based on the random number and a user identification number; and
authenticating at least one registration message in the MBMS based on the RGK, wherein the RGK is a function of a radio access network key (RAK), a service identification number and a user identification number, and wherein the RAK is a function of the random number and a key selected from the group consisting of a public land mobile network key (PK) and a broadcast access key (BAK).

53. (Canceled) ~~The computer readable medium of claim 52, wherein the RGK is a function of a radio access network key (RAK) which is a function of the random number and a key selected from the group consisting of a public land mobile network key (PK) and a broadcast access key (BAK).~~

54. (Currently Amended) The computer readable medium of claim [[53]] 52, wherein the PK is extracted from a provisioning message received from a broadcast-multicast service center.

55. (Original) The computer readable medium of claim 54, wherein the provisioning message is a function of the PK and a permanent registration key (RK).

56. (Canceled) ~~The computer readable medium of claim 53, wherein the RGK is a function of the RAK, a service identification number and a user identification number.~~

57. (Currently Amended) The computer readable medium of claim [[56]] 52, wherein the RGK is a function of the RAK and a cyclic redundancy code (CRC) computed from the service identification number and the user identification number.

58. (Original) The computer readable medium of claim 52, wherein the UICC comprises a subscriber identity module (SIM) in a Global System for Mobile communication (GSM) system.

59. (Original) The computer readable medium of claim 52, wherein the UICC comprises a removable user identity module (RUIM) in a code division multiple access (CDMA) system.

60. (Original) The computer readable medium of claim 52, wherein the PK is provisioned by using a public key.

61. (Original) The computer readable medium of claim 52, wherein the BAK is provisioned by using a public key.